

**ABSTRACT**

Apparatus for scanning a beam across a surface including a scanner scanning a pulsed laser beam across a surface and a position indicator receiving an input from the pulsed laser beam at a plurality of locations across the surface, and outputting position indications indicating a position of said pulsed laser beam along said surface. The position indications are used to modulate data in apparatus for exposing patterns on surfaces, for example electrical circuit patterns on photosensitized surfaces. One use of such apparatus is the manufacture of electrical circuits.

10